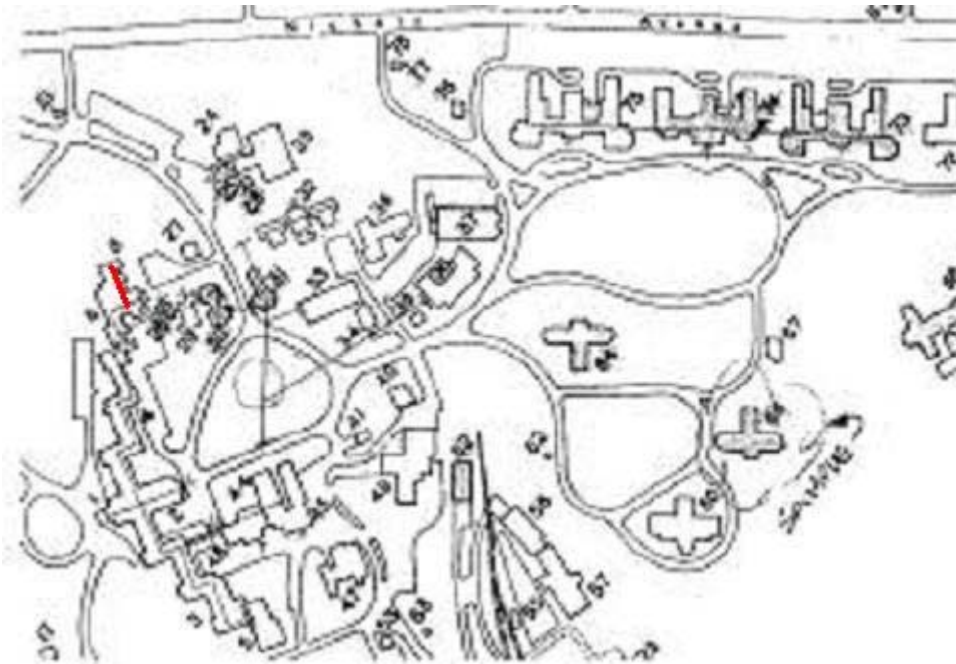


TUNNEL IDENTIFICATION AND DESCRIPTION

| | |
|------------------|---------|
| Lining Material | Brick |
| Total Length | 80.0 FT |
| Springline Width | N/A |
| Begin Building | 8 |
| End Building | 8 |

| | |
|------------------------|-------------|
| Tunnel Height | N/A |
| Year Constructed | 1900 (est.) |
| Year Reconstructed | |
| Entry Through Building | 8 |

Tunnel previously connected to the basement level of Building 6, Pine to the basement level of Building 8, Willow. Currently, a masonry block wall seals off the direct connection to Tunnel 6-8. Now Tunnel 8-8 primarily services the basement of building 8.

LOCATION MAP

INSPECTION TEAM: T. Suthers, J. Wolfe (Burgess & Niple, Inc.)

EXECUTIVE SUMMARY

This tunnel is 80 feet long and runs below Building 8. Building 6 is to the west of the tunnel below Building 8. The tunnel lining is composed of brick, masonry block, concrete, and timber and is in good condition. Utilities within the tunnel at the time of inspection include water, steam, electric, and telephone; none of which were functioning. Minor problems at this time include debris on the floor and deteriorated utilities.

RECOMMENDATIONS**Critical Repairs:**

None.

Priority Repairs:

None.

Routine Repairs:

1. Remove debris from floor, 2 CY.
2. Replace electric lines, 80 LF.
3. Replace lighting conduits and wiring, 80 LF.

FIELD INSPECTION REPORT**STRUCTURE NO. 8-8****INSPECTION DATE: 12/13/05**

| CONDITION RATING CODES | | | |
|--|--|---|--|
| N | NOT APPLICABLE | 2 | CRITICAL CONDITION – advanced deterioration of primary structural elements. Failure cracks in steel or shear cracks in concrete may be present or scour may have removed substructure support. Unless closely monitored it may be necessary to close the structure until corrective action can be taken. |
| 9 | EXCELLENT CONDITION | | |
| 8 | VERY GOOD CONDITION – no problems noted. | | |
| 7 | GOOD CONDITION – some minor problems. | | |
| 6 | SATISFACTORY CONDITION – structural elements show some minor deterioration. | | |
| 5 | FAIR CONDITION – all primary structural elements are sound but may have minor section loss, cracking, spalling, or scour. | 1 | “IMMINENT” FAILURE CONDITION – major deterioration or section loss present in critical structural components or obvious vertical or horizontal movement affecting structure stability. Structure is closed to traffic but corrective action may return structure to light service. |
| 4 | POOR CONDITION – advanced section loss, deterioration, spalling, or scour. | | |
| 3 | SERIOUS CONDITION – loss of section, deterioration, spalling, or scour have seriously affected primary structural components. Local failures are possible. Fatigue cracks in steel or shear cracks in concrete may be present. | 0 | FAILED CONDITION – out of service; beyond corrective action. |
| CONDITION RATING CODE EQUIVALENTS FOR SUB-ELEMENTS | | | |
| G = GOOD (CODES 7 – 9) F = FAIR (CODES 5 – 6) P = POOR (CODES 0 – 4) | | | |

| | |
|----------------------|----------|
| 59. TUNNEL | 7 |
| 1. LINING | G |
| 2. PORTALS | G |
| 3. FLOOR | G |
| 4. DRAINS & DRAINAGE | G |
| 5. VENTILATION | G |
| 6. OTHER (debris) | F |
| 7. OTHER | N |
| 8. OTHER | N |

| | |
|-----------|---|
| 59.6 | Minor to moderate debris on floor. |
| 402.1,2,3 | Moderate corrosion on pipes and conduits. |
| 402.6 | Phone wiring hanging in areas. |
| | |
| | |
| | |
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| | |
| | |
| | |

| | |
|-------------------------|----------|
| 401. ACCESS ROOM | N |
| 1. WALL | N |
| 2. CEILING | N |
| 3. FLOOR | N |
| 4. STAIRWAY | N |
| 5. OTHER | N |
| 6. OTHER | N |
| 7. OTHER | N |

| | |
|-----------------------|----------|
| 402. UTILITIES | 4 |
| 1. STEAM | P |
| 2. WATER | P |
| 3. ELECTRICAL | P |
| 4. GAS | N |
| 5. FIBER OPTIC | N |
| 6. OTHER (telephone) | P |
| 7. OTHER | N |
| 8. OTHER | N |

PHOTOS

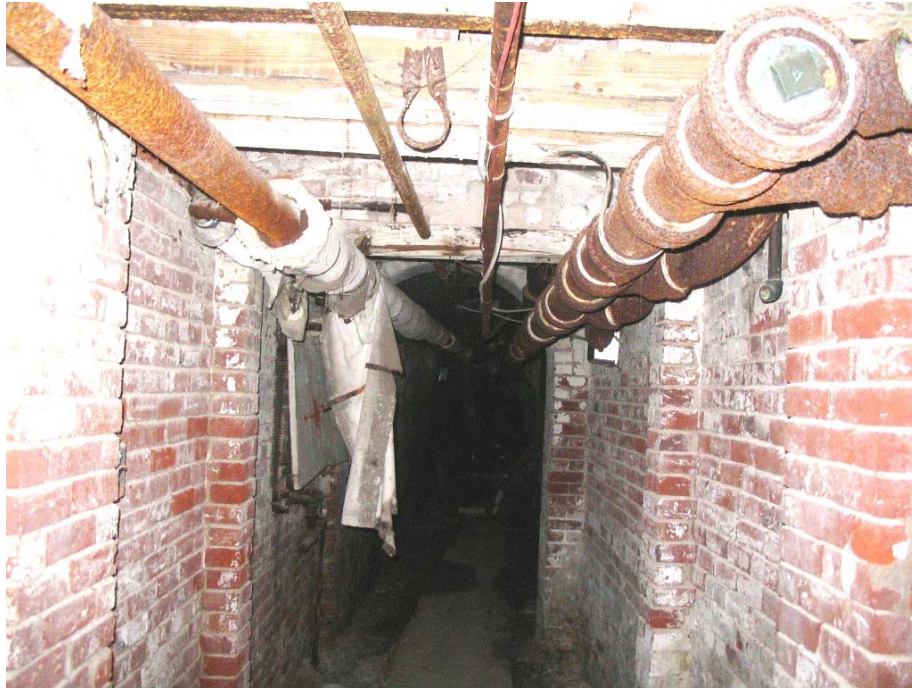


Photo 1: East portal



Photo 2: West portal, east side

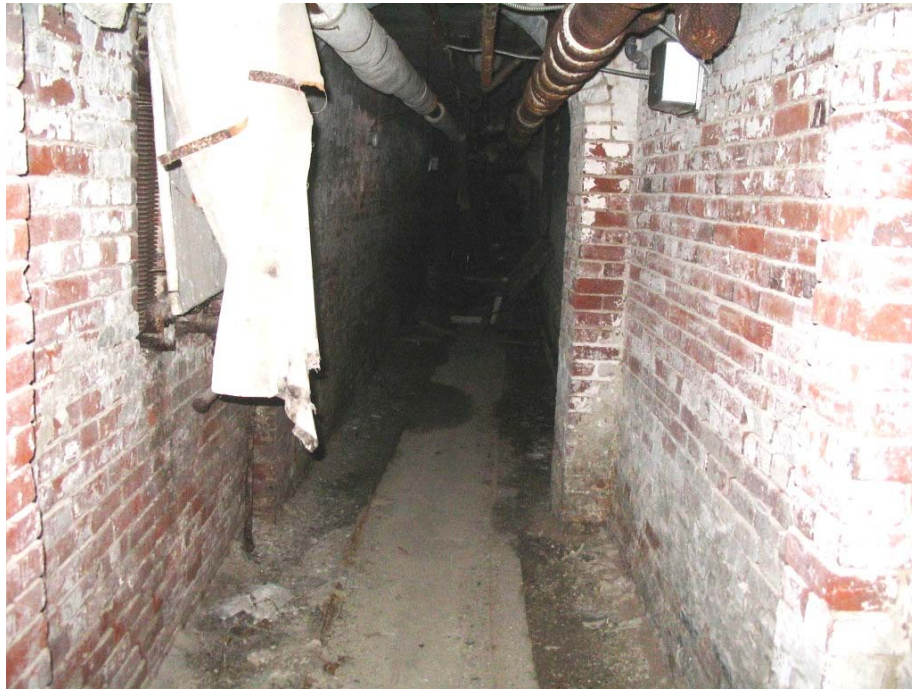


Photo 3: General view of lining, looking east



Photo 4: East end of rails; Note debris on floor and hanging telephone wire



Photo 5: Debris on floor, looking east from west portal



Photo 6: Damage light fixture; Note corrosion on pipe and conduits

TUNNEL INSPECTION REPORT

ST. ELIZABETHS HOSPITAL – WEST CAMPUS
WASHINGTON, D.C.
TUNNEL BETWEEN BUILDINGS 25 & 26



EAST PORTAL



WEST PORTAL

Report Prepared by:
Burgess & Niple, Inc.
4160 Pleasant Valley Road
Chantilly, VA 20151

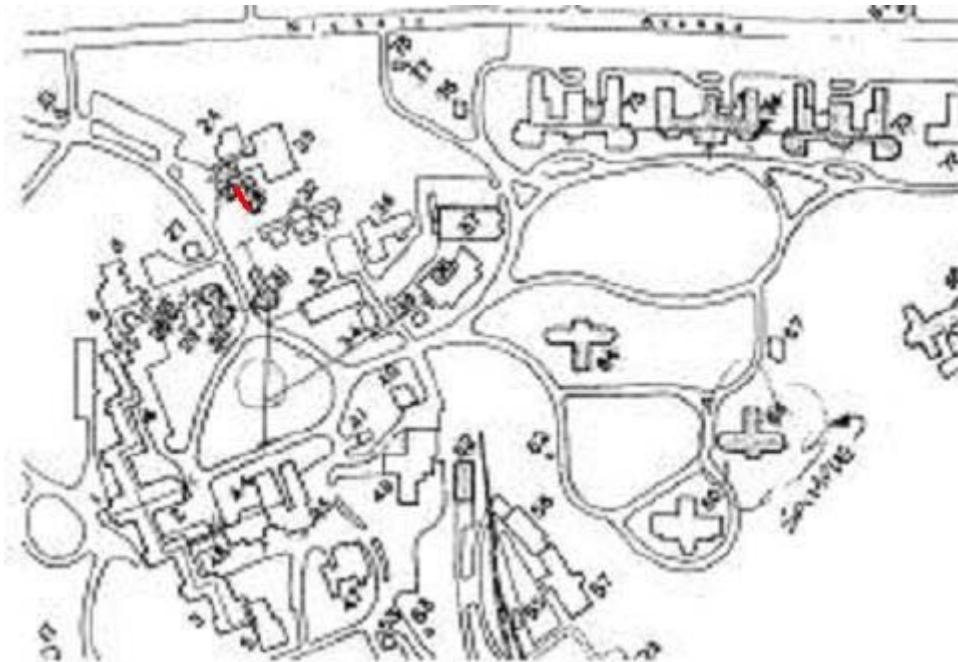
Inspection Date: 12/14/05

TUNNEL IDENTIFICATION AND DESCRIPTION

| | |
|------------------|-------|
| Lining Material | Brick |
| Total Length | N/A |
| Springline Width | N/A |
| Begin Building | 25 |
| End Building | 26 |

| | |
|------------------------|-------------|
| Tunnel Height | N/A |
| Year Constructed | 1900 (est.) |
| Year Reconstructed | |
| Entry Through Building | N/A |

Tunnel previously connected the basement level of Building 25, Allison A to the basement level of Building 26, Allison B. Currently a masonry block wall prevents access in the basement of Building 25, while the stairwell is bolted shut inside Building 26. No other entries were found.

LOCATION MAP

INSPECTION TEAM: T. Suthers, J. Wolfe (Burgess & Niple, Inc.)

EXECUTIVE SUMMARY

This tunnel runs between Buildings 25 and 26. Building 25 is at the east end of the tunnel and Building 26 is at the west end. The tunnel could not be accessed due to a bolted shut door at Building 26 and a blocked in doorway at Building 25.

RECOMMENDATIONS**Critical Repairs:**

None.

Priority Repairs:

None.

Routine Repairs:

None.

FIELD INSPECTION REPORT**STRUCTURE NO. 25-26****INSPECTION DATE: 12/14/05**

| CONDITION RATING CODES | | | |
|--|--|---|--|
| N | NOT APPLICABLE | 2 | CRITICAL CONDITION – advanced deterioration of primary structural elements. Failure cracks in steel or shear cracks in concrete may be present or scour may have removed substructure support. Unless closely monitored it may be necessary to close the structure until corrective action can be taken. |
| 9 | EXCELLENT CONDITION | | |
| 8 | VERY GOOD CONDITION – no problems noted. | | |
| 7 | GOOD CONDITION – some minor problems. | | |
| 6 | SATISFACTORY CONDITION – structural elements show some minor deterioration. | | |
| 5 | FAIR CONDITION – all primary structural elements are sound but may have minor section loss, cracking, spalling, or scour. | 1 | “IMMINENT” FAILURE CONDITION – major deterioration or section loss present in critical structural components or obvious vertical or horizontal movement affecting structure stability. Structure is closed to traffic but corrective action may return structure to light service. |
| 4 | POOR CONDITION – advanced section loss, deterioration, spalling, or scour. | | |
| 3 | SERIOUS CONDITION – loss of section, deterioration, spalling, or scour have seriously affected primary structural components. Local failures are possible. Fatigue cracks in steel or shear cracks in concrete may be present. | 0 | FAILED CONDITION – out of service; beyond corrective action. |
| CONDITION RATING CODE EQUIVALENTS FOR SUB-ELEMENTS | | | |
| G = GOOD (CODES 7 – 9) F = FAIR (CODES 5 – 6) P = POOR (CODES 0 – 4) | | | |

| | |
|----------------------|----------|
| 59. TUNNEL | N |
| 1. LINING | N |
| 2. PORTALS | N |
| 3. FLOOR | N |
| 4. DRAINS & DRAINAGE | N |
| 5. VENTILATION | N |
| 6. OTHER | N |
| 7. OTHER | N |
| 8. OTHER | N |

| | |
|-------------------------|----------|
| 401. ACCESS ROOM | N |
| 1. WALL | N |
| 2. CEILING | N |
| 3. FLOOR | N |
| 4. STAIRWAY | N |
| 5. OTHER | N |
| 6. OTHER | N |
| 7. OTHER | N |

| | |
|-----------------------|----------|
| 402. UTILITIES | N |
| 1. STEAM | N |
| 2. WATER | N |
| 3. ELECTRICAL | N |
| 4. GAS | N |
| 5. FIBER OPTIC | N |
| 6. OTHER | N |
| 7. OTHER | N |
| 8. OTHER | N |

| | |
|---------|---|
| 59, 402 | Could not access tunnel due to blocked in and bolted entrances. |
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PHOTOS



Photo 1: East portal; Note blocked in entrance



Photo 2: West portal; Note bolted shut door

TUNNEL INSPECTION REPORT

ST. ELIZABETHS HOSPITAL – WEST CAMPUS
WASHINGTON, D.C.
TUNNEL BETWEEN BUILDINGS 28 & 29



NORTH PORTAL



SOUTH PORTAL

Report Prepared by:
Burgess & Niple, Inc.
4160 Pleasant Valley Road
Chantilly, VA 20151

Inspection Date: 12/13/05

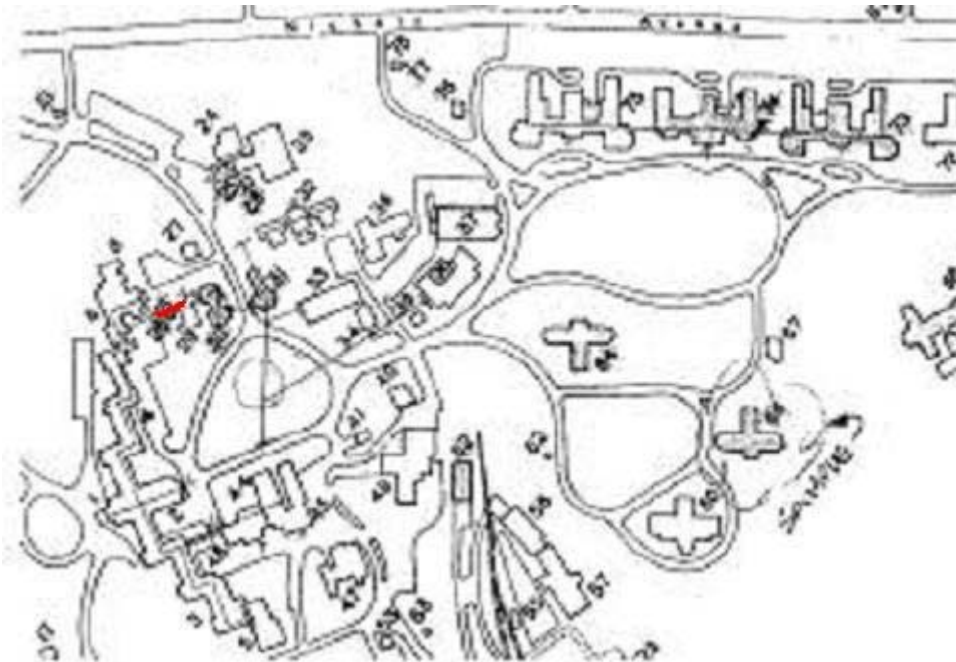
TUNNEL IDENTIFICATION AND DESCRIPTION

| | |
|------------------|---------|
| Lining Material | Brick |
| Total Length | 65.0 FT |
| Springline Width | 5.0 FT |
| Begin Building | 28 |
| End Building | 29 |

| | |
|------------------------|-------------|
| Tunnel Height | 6.4 FT * |
| Year Constructed | 1900 (est.) |
| Year Reconstructed | |
| Entry Through Building | 28 |

Tunnel connects the basement level of Building 28, Linden to the basement level of Building 29, Holly. Currently, access is permitted through the stairwell in Building 28.

* 4.75 FT vertical clearance below pipe across tunnel near south portal

LOCATION MAP

INSPECTION TEAM: T. Suthers, J. Wolfe (Burgess & Niple, Inc.)

EXECUTIVE SUMMARY

This tunnel is 65 feet long by 5 feet wide and runs between Buildings 28 and 29. Building 28 is at the north end of the tunnel and Building 29 is at the south end. The tunnel lining is composed of brick and is in fair condition. Utilities within the tunnel at the time of inspection include water, steam, electric, and telephone; none of which were functioning. Minor problems at this time include deteriorated mortar at both portals and deteriorated utilities.

RECOMMENDATIONS**Critical Repairs:**

None.

Priority Repairs:

None.

Routine Repairs:

1. Replace electric lines, 65 LF.
2. Replace lighting conduits and wiring, 65 LF.

FIELD INSPECTION REPORT**STRUCTURE NO. 28-29****INSPECTION DATE: 12/13/05**

| CONDITION RATING CODES | | | |
|--|--|---|--|
| N | NOT APPLICABLE | 2 | CRITICAL CONDITION – advanced deterioration of primary structural elements. Failure cracks in steel or shear cracks in concrete may be present or scour may have removed substructure support. Unless closely monitored it may be necessary to close the structure until corrective action can be taken. |
| 9 | EXCELLENT CONDITION | | |
| 8 | VERY GOOD CONDITION – no problems noted. | | |
| 7 | GOOD CONDITION – some minor problems. | | |
| 6 | SATISFACTORY CONDITION – structural elements show some minor deterioration. | | |
| 5 | FAIR CONDITION – all primary structural elements are sound but may have minor section loss, cracking, spalling, or scour. | 1 | “IMMINENT” FAILURE CONDITION – major deterioration or section loss present in critical structural components or obvious vertical or horizontal movement affecting structure stability. Structure is closed to traffic but corrective action may return structure to light service. |
| 4 | POOR CONDITION – advanced section loss, deterioration, spalling, or scour. | | |
| 3 | SERIOUS CONDITION – loss of section, deterioration, spalling, or scour have seriously affected primary structural components. Local failures are possible. Fatigue cracks in steel or shear cracks in concrete may be present. | 0 | FAILED CONDITION – out of service; beyond corrective action. |
| CONDITION RATING CODE EQUIVALENTS FOR SUB-ELEMENTS | | | |
| G = GOOD (CODES 7 – 9) F = FAIR (CODES 5 – 6) P = POOR (CODES 0 – 4) | | | |

| | |
|----------------------|----------|
| 59. TUNNEL | 6 |
| 1. LINING | F |
| 2. PORTALS | F |
| 3. FLOOR | G |
| 4. DRAINS & DRAINAGE | G |
| 5. VENTILATION | G |
| 6. OTHER | N |
| 7. OTHER | N |
| 8. OTHER | N |

| | |
|-------------------------|----------|
| 401. ACCESS ROOM | N |
| 1. WALL | N |
| 2. CEILING | N |
| 3. FLOOR | N |
| 4. STAIRWAY | N |
| 5. OTHER | N |
| 6. OTHER | N |
| 7. OTHER | N |

| | |
|-----------------------|----------|
| 402. UTILITIES | 4 |
| 1. STEAM | P |
| 2. WATER | P |
| 3. ELECTRICAL | P |
| 4. GAS | N |
| 5. FIBER OPTIC | N |
| 6. OTHER (telephone) | P |
| 7. OTHER | N |
| 8. OTHER | N |

| | |
|-------------|--|
| 59.1 | Minor loss of mortar in several areas throughout. Minor water seepage through west wall near north and south portals. |
| 59.2 | Moderate loss of mortar around top of arch ring at north and south portals. |
| 59.3 | Piping and minor debris on floor. |
| 402.1,2,3,6 | Moderate corrosion on pipes and conduits. Exposed wiring on conduit at south portal. Sagging and corroded wiring in areas. |
| | |
| | |
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| | |

PHOTOS



Photo 1: North portal



Photo 2: South portal



Photo 3: Looking north from Building 29



Photo 4: General view of lining, looking toward north portal;
Note water seepage on west wall



Photo 5: Water seepage through west wall below pipe near south portal;
Note sagging electric line and corrosion on conduits



Photo 6: Deteriorated mortar between bricks around top of arch, north portal;
Note corrosion on conduits



Photo 7: Deteriorated mortar between bricks around top of arch, south portal



Photo 8: Corrosion on conduits at south portal; Note exposed wires



Photo 9: Corrosion on conduits



Photo 10: Debris and piping on floor, looking north from south portal

TUNNEL INSPECTION REPORT

ST. ELIZABETHS HOSPITAL – WEST CAMPUS
WASHINGTON, D.C.
TUNNEL BETWEEN BUILDINGS 29 & 30



NORTH PORTAL



SOUTH PORTAL

Report Prepared by:
Burgess & Niple, Inc.
4160 Pleasant Valley Road
Chantilly, VA 20151

Inspection Date: 12/13/05

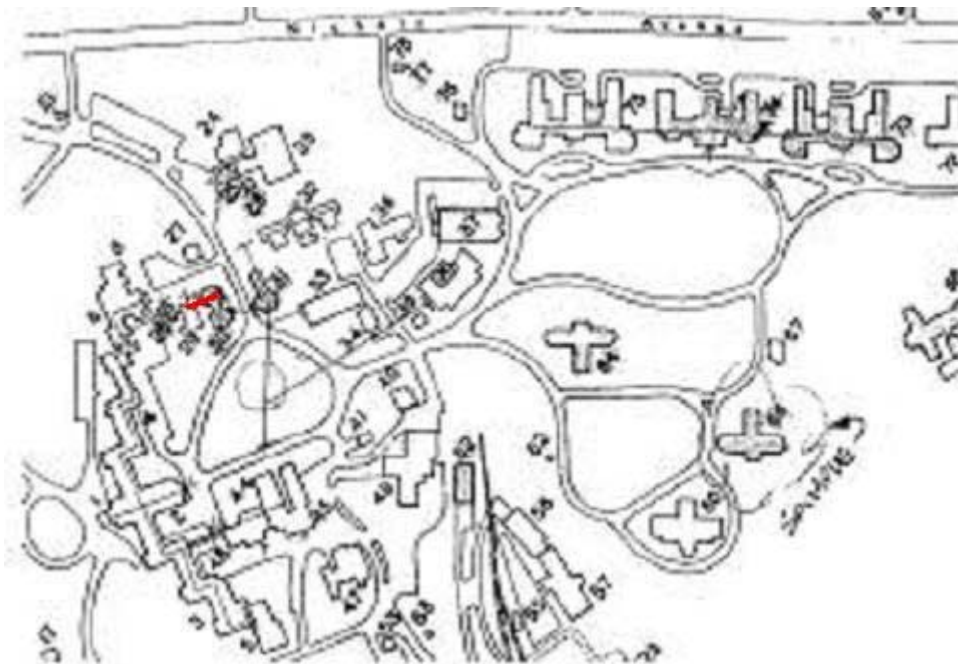
TUNNEL IDENTIFICATION AND DESCRIPTION

| | |
|------------------|----------|
| Lining Material | Brick |
| Total Length | 55.0 FT |
| Springline Width | 6.0 FT * |
| Begin Building | 29 |
| End Building | 30 |

| | |
|------------------------|-------------|
| Tunnel Height | 6.5 FT |
| Year Constructed | 1900 (est.) |
| Year Reconstructed | |
| Entry Through Building | 30 |

Tunnel connects the basement level of Building 29, Holly to the basement level of Building 30, The Detached Nurses Home. Currently access is permitted through the stairwell in Building 30.

* width limited to 4 FT at south portal and 5 FT at north portal

LOCATION MAP

INSPECTION TEAM: T. Suthers, J. Wolfe (Burgess & Niple, Inc.)

EXECUTIVE SUMMARY

This tunnel is 55 feet long by 6 feet wide and runs between Buildings 29 and 30. Building 29 is at the north end of the tunnel and Building 30 is at the south end. The tunnel lining is composed of brick and is in fair condition. Utilities within the tunnel at the time of inspection include water, steam, electric, and telephone; none of which were functioning. Minor problems at this time include deteriorated utilities, debris on the floor, and a tripping hazard due to a concrete cap over a utility across the floor.

RECOMMENDATIONS**Critical Repairs:**

None.

Priority Repairs:

None.

Routine Repairs:

1. Replace electric lines, 55 LF.
2. Replace lighting conduits and wiring, 55 LF.
3. Remove debris from floor, 2 CY.

FIELD INSPECTION REPORT**STRUCTURE NO. 29-30****INSPECTION DATE: 12/13/05**

| CONDITION RATING CODES | | | |
|--|--|---|--|
| N | NOT APPLICABLE | 2 | CRITICAL CONDITION – advanced deterioration of primary structural elements. Failure cracks in steel or shear cracks in concrete may be present or scour may have removed substructure support. Unless closely monitored it may be necessary to close the structure until corrective action can be taken. |
| 9 | EXCELLENT CONDITION | | |
| 8 | VERY GOOD CONDITION – no problems noted. | | |
| 7 | GOOD CONDITION – some minor problems. | | |
| 6 | SATISFACTORY CONDITION – structural elements show some minor deterioration. | | |
| 5 | FAIR CONDITION – all primary structural elements are sound but may have minor section loss, cracking, spalling, or scour. | 1 | “IMMINENT” FAILURE CONDITION – major deterioration or section loss present in critical structural components or obvious vertical or horizontal movement affecting structure stability. Structure is closed to traffic but corrective action may return structure to light service. |
| 4 | POOR CONDITION – advanced section loss, deterioration, spalling, or scour. | | |
| 3 | SERIOUS CONDITION – loss of section, deterioration, spalling, or scour have seriously affected primary structural components. Local failures are possible. Fatigue cracks in steel or shear cracks in concrete may be present. | 0 | FAILED CONDITION – out of service; beyond corrective action. |
| CONDITION RATING CODE EQUIVALENTS FOR SUB-ELEMENTS | | | |
| G = GOOD (CODES 7 – 9) F = FAIR (CODES 5 – 6) P = POOR (CODES 0 – 4) | | | |

| | |
|----------------------|----------|
| 59. TUNNEL | 6 |
| 1. LINING | G |
| 2. PORTALS | G |
| 3. FLOOR | F |
| 4. DRAINS & DRAINAGE | G |
| 5. VENTILATION | G |
| 6. OTHER | N |
| 7. OTHER | N |
| 8. OTHER | N |

| | |
|-------------------------|----------|
| 401. ACCESS ROOM | N |
| 1. WALL | N |
| 2. CEILING | N |
| 3. FLOOR | N |
| 4. STAIRWAY | N |
| 5. OTHER | N |
| 6. OTHER | N |
| 7. OTHER | N |

| | |
|-----------------------|----------|
| 402. UTILITIES | 4 |
| 1. STEAM | P |
| 2. WATER | P |
| 3. ELECTRICAL | P |
| 4. GAS | N |
| 5. FIBER OPTIC | N |
| 6. OTHER (telephone) | P |
| 7. OTHER | N |
| 8. OTHER | N |

| | |
|-------------|---|
| 59.3 | Floor is covered with dirt and debris. Floor is out of level in some areas. Utility concrete cap passing across tunnel floor creates a tripping hazard. |
| 402.1,2,3,6 | Moderate to heavy corrosion on pipes and conduits. Sagging wires in several locations. |
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PHOTOS



Photo 1: North portal



Photo 2: South portal; Note utility concrete cap across floor



Photo 3: Debris on floor and corroded pipe along west wall;
Note utility concrete cap across floor



Photo 4: Corrosion on pipe and conduits along ceiling;
Note corrosion on pipe crossing below conduits near south portal



Photo 5: Open junction box on conduit at north portal



Photo 6: Damaged light fixture on east wall

TUNNEL INSPECTION REPORT

ST. ELIZABETHS HOSPITAL – WEST CAMPUS
WASHINGTON, D.C.
TUNNEL BETWEEN BUILDINGS 31 & 32



WEST PORTAL



EAST PORTAL

Report Prepared by:
Burgess & Niple, Inc.
4160 Pleasant Valley Road
Chantilly, VA 20151

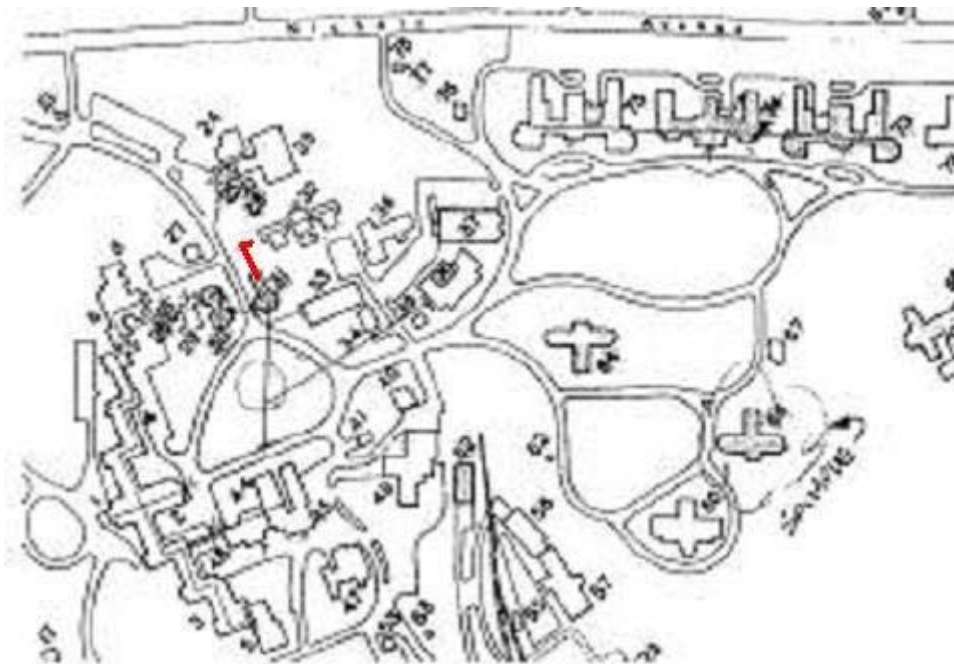
Inspection Date: 12/12/05

TUNNEL IDENTIFICATION AND DESCRIPTION

| | |
|------------------|---------|
| Lining Material | Brick |
| Total Length | 60.0 FT |
| Springline Width | 6.0 FT |
| Begin Building | 31 |
| End Building | 32 |

| | |
|------------------------|-------------|
| Tunnel Height | 7.0 FT |
| Year Constructed | 1900 (est.) |
| Year Reconstructed | |
| Entry Through Building | 31 |

Tunnel previously connected the basement level of Building 31, Atkins Hall and the basement level of Building 32, Relief. Currently, the stairwell outside of Building 44 is bricked off eliminating access. Access is gained from Building 31.

LOCATION MAP

INSPECTION TEAM: T. Suthers, J. Wolfe (Burgess & Niple, Inc.)

EXECUTIVE SUMMARY

This tunnel is 60 feet long by 6 feet wide and runs between Building 31 and Building 32. Building 32 is at the east end of the tunnel and building 31 is at the west end. The tunnel lining is composed of brick and is in fair condition. Utilities within the tunnel at the time of inspection include water, steam, and electric; none of which were functioning. Minor problems at this time include deteriorated mortar joints in lining, busted bricks at north portal for routing pipes, vertical crack at south portal, and corrosion of utility pipes and conduits.

RECOMMENDATIONS**Critical Repairs:**

None.

Priority Repairs:

None.

Routine Repairs:

1. Replace electrical lines, 60 LF.
2. Replace lighting conduit and wiring, 60 LF.

FIELD INSPECTION REPORT**STRUCTURE NO. 31-32****INSPECTION DATE: 12/12/05**

| CONDITION RATING CODES | | | |
|--|--|---|--|
| N | NOT APPLICABLE | 2 | CRITICAL CONDITION – advanced deterioration of primary structural elements. Failure cracks in steel or shear cracks in concrete may be present or scour may have removed substructure support. Unless closely monitored it may be necessary to close the structure until corrective action can be taken. |
| 9 | EXCELLENT CONDITION | | |
| 8 | VERY GOOD CONDITION – no problems noted. | | |
| 7 | GOOD CONDITION – some minor problems. | | |
| 6 | SATISFACTORY CONDITION – structural elements show some minor deterioration. | | |
| 5 | FAIR CONDITION – all primary structural elements are sound but may have minor section loss, cracking, spalling, or scour. | 1 | “IMMINENT” FAILURE CONDITION – major deterioration or section loss present in critical structural components or obvious vertical or horizontal movement affecting structure stability. Structure is closed to traffic but corrective action may return structure to light service. |
| 4 | POOR CONDITION – advanced section loss, deterioration, spalling, or scour. | | |
| 3 | SERIOUS CONDITION – loss of section, deterioration, spalling, or scour have seriously affected primary structural components. Local failures are possible. Fatigue cracks in steel or shear cracks in concrete may be present. | 0 | FAILED CONDITION – out of service; beyond corrective action. |
| CONDITION RATING CODE EQUIVALENTS FOR SUB-ELEMENTS | | | |
| G = GOOD (CODES 7 – 9) F = FAIR (CODES 5 – 6) P = POOR (CODES 0 – 4) | | | |

| | |
|----------------------|----------|
| 59. TUNNEL | 6 |
| 1. LINING | F |
| 2. PORTALS | F |
| 3. FLOOR | G |
| 4. DRAINS & DRAINAGE | G |
| 5. VENTILATION | G |
| 6. OTHER | N |
| 7. OTHER | N |
| 8. OTHER | N |

| | |
|-------------------------|----------|
| 401. ACCESS ROOM | N |
| 1. WALL | N |
| 2. CEILING | N |
| 3. FLOOR | N |
| 4. STAIRWAY | N |
| 5. OTHER | N |
| 6. OTHER | N |
| 7. OTHER | N |

| | |
|-----------------------|----------|
| 402. UTILITIES | 4 |
| 1. STEAM | P |
| 2. WATER | P |
| 3. ELECTRICAL | P |
| 4. GAS | N |
| 5. FIBER OPTIC | N |
| 6. OTHER | N |
| 7. OTHER | N |
| 8. OTHER | N |

| | |
|---------|---|
| 59.1 | Minor to moderate deterioration of brick lining mortar joints. |
| 59.2 | Vertical crack through bricks on east side of south portal. Busted bricks for water pipes routing through north portal. |
| 402.1,2 | Steam and water pipes have moderate to heavy corrosion. Steam pipe is supported by timber shoring at south portal. |
| 402.3 | Electrical and lighting conduits have moderate to heavy corrosion. |
| | |
| | |
| | |
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| | |
| | |

PHOTOS



Photo 1: West portal in basement of Building 31, Atkins Hall



Photo 2: East portal near Building 32, Relief



Photo 3: General view looking east from west portal

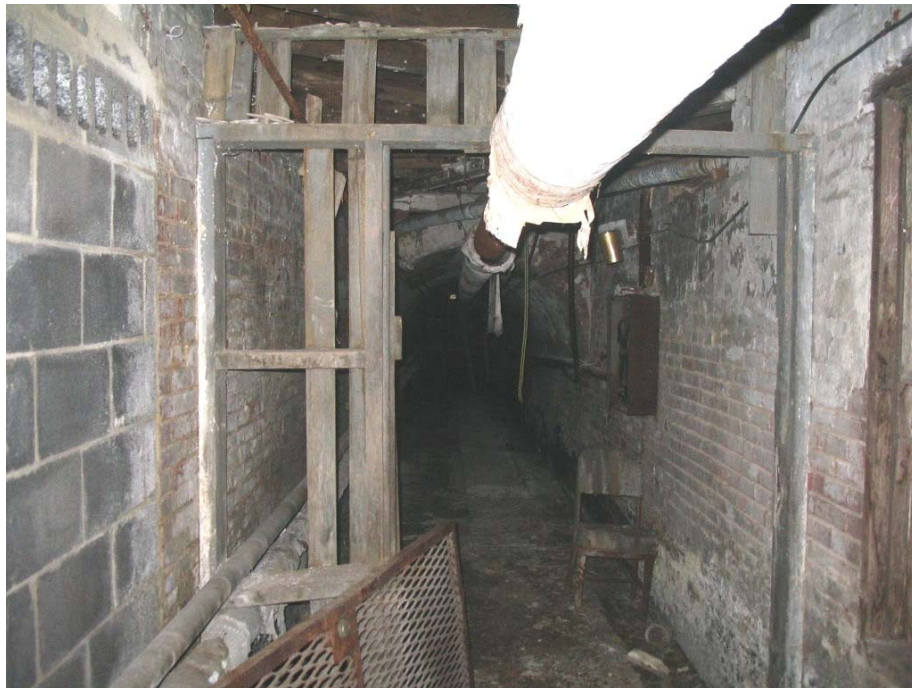


Photo 4: General view looking west toward east portal



Photo 5: Vertical crack in bricks on east side of south portal



Photo 6: Busted bricks for routing water pipes through north portal



Photo 7: Corrosion on steam and water pipes at west portal;
Note timber support below steam pipe



Photo 8: Typical corrosion on lighting conduit

TUNNEL INSPECTION REPORT

ST. ELIZABETHS HOSPITAL – WEST CAMPUS
WASHINGTON, D.C.
TUNNEL BETWEEN BUILDINGS 31 & 33



NORTH PORTAL



SOUTH PORTAL

Report Prepared by:
Burgess & Niple, Inc.
4160 Pleasant Valley Road
Chantilly, VA 20151

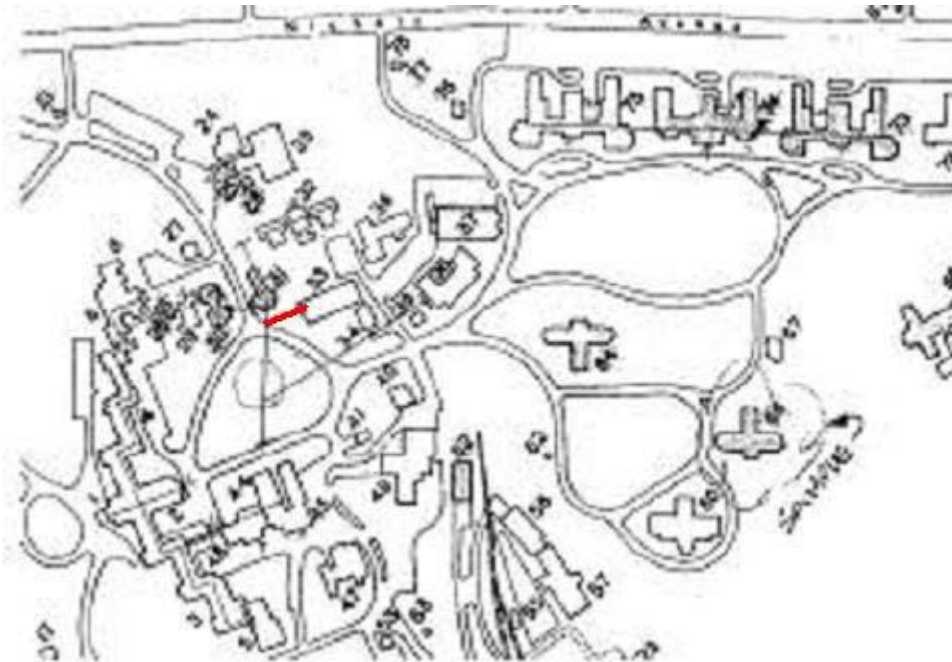
Inspection Date: 12/12/05

TUNNEL IDENTIFICATION AND DESCRIPTION

| | |
|------------------|---------|
| Lining Material | Brick |
| Total Length | 75.0 FT |
| Springline Width | 6.0 FT |
| Begin Building | 31 |
| End Building | 33 |

| | |
|------------------------|-------------|
| Tunnel Height | 7.0 FT |
| Year Constructed | 1900 (est.) |
| Year Reconstructed | |
| Entry Through Building | 31 |

Tunnel connects between tunnel 31-44 and the basement level of Building 33, The Detached Dining Hall. Currently the stairwell outside of Building 44 is bricked off eliminating access. Access is also blocked into Building 33.

LOCATION MAP

INSPECTION TEAM: T. Suthers, J. Wolfe (Burgess & Niple, Inc.)

EXECUTIVE SUMMARY

This tunnel is 75 feet long by 6 feet wide and runs between tunnel 31-44 and Building 33. Tunnel 31-44 is at the north end of the tunnel and Building 33 is at the south end. The tunnel lining is composed of brick and is in fair condition. Utilities within the tunnel at the time of inspection include water, steam, and electric; none of which were functioning. Minor problems at this time include deteriorated mortar joints in the lining, chipped bricks at the north portal, and deteriorated utilities throughout.

RECOMMENDATIONS**Critical Repairs:**

None.

Priority Repairs:

None.

Routine Repairs:

1. Replace electrical lines, 75 LF.
2. Replace lighting conduits and wiring, 75 LF.

FIELD INSPECTION REPORT**STRUCTURE NO. 31-33****INSPECTION DATE: 12/12/05**

| CONDITION RATING CODES | | | |
|--|--|---|--|
| N | NOT APPLICABLE | 2 | CRITICAL CONDITION – advanced deterioration of primary structural elements. Failure cracks in steel or shear cracks in concrete may be present or scour may have removed substructure support. Unless closely monitored it may be necessary to close the structure until corrective action can be taken. |
| 9 | EXCELLENT CONDITION | | |
| 8 | VERY GOOD CONDITION – no problems noted. | | |
| 7 | GOOD CONDITION – some minor problems. | | |
| 6 | SATISFACTORY CONDITION – structural elements show some minor deterioration. | | |
| 5 | FAIR CONDITION – all primary structural elements are sound but may have minor section loss, cracking, spalling, or scour. | 1 | “IMMINENT” FAILURE CONDITION – major deterioration or section loss present in critical structural components or obvious vertical or horizontal movement affecting structure stability. Structure is closed to traffic but corrective action may return structure to light service. |
| 4 | POOR CONDITION – advanced section loss, deterioration, spalling, or scour. | | |
| 3 | SERIOUS CONDITION – loss of section, deterioration, spalling, or scour have seriously affected primary structural components. Local failures are possible. Fatigue cracks in steel or shear cracks in concrete may be present. | 0 | FAILED CONDITION – out of service; beyond corrective action. |
| CONDITION RATING CODE EQUIVALENTS FOR SUB-ELEMENTS | | | |
| G = GOOD (CODES 7 – 9) F = FAIR (CODES 5 – 6) P = POOR (CODES 0 – 4) | | | |

| | |
|----------------------|----------|
| 59. TUNNEL | 6 |
| 1. LINING | F |
| 2. PORTALS | F |
| 3. FLOOR | G |
| 4. DRAINS & DRAINAGE | G |
| 5. VENTILATION | G |
| 6. OTHER | N |
| 7. OTHER | N |
| 8. OTHER | N |

| | |
|-------------------------|----------|
| 401. ACCESS ROOM | N |
| 1. WALL | N |
| 2. CEILING | N |
| 3. FLOOR | N |
| 4. STAIRWAY | N |
| 5. OTHER | N |
| 6. OTHER | N |
| 7. OTHER | N |

| | |
|-----------------------|----------|
| 402. UTILITIES | 4 |
| 1. STEAM | P |
| 2. WATER | P |
| 3. ELECTRICAL | P |
| 4. GAS | N |
| 5. FIBER OPTIC | N |
| 6. OTHER | N |
| 7. OTHER | N |
| 8. OTHER | N |

| | |
|---------|---|
| 59.1 | Minor deterioration of mortar joints throughout. |
| 59.2 | Chipped bricks along edge of north portal due to routing of steam pipe. South portal is closed with doorways nailed shut. |
| 402.1,2 | Moderate corrosion of steam and water lines. |
| 402.3 | Electrical and lighting wires are draped along walls. |
| | |
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| | |

PHOTOS



Photo 1: North portal; Note chipped bricks



Photo 2: South portal; Note downed and sagging electrical lines



Photo 3: Downed wiring at north end of tunnel, junction with tunnel 31-44



Photo 4: Corrosion on steam and water pipes, north portal

TUNNEL INSPECTION REPORT

ST. ELIZABETHS HOSPITAL – WEST CAMPUS
WASHINGTON, D.C.
TUNNEL BETWEEN BUILDINGS 31 & 38



NORTH PORTAL



SOUTH PORTAL

Report Prepared by:
Burgess & Niple, Inc.
4160 Pleasant Valley Road
Chantilly, VA 20151

Inspection Date: 12/12/05

TUNNEL IDENTIFICATION AND DESCRIPTION

| | |
|------------------|----------|
| Lining Material | Brick |
| Total Length | 640.0 FT |
| Springline Width | 6.0 FT |
| Begin Building | T-31-44 |
| End Building | 38 |

| | |
|------------------------|-------------|
| Tunnel Height | 7.0 FT |
| Year Constructed | 1900 (est.) |
| Year Reconstructed | |
| Entry Through Building | 31 |

Tunnel connects between Tunnel 31-44 and an intersection with three steam pipe chases, south of the basement level of Building 38, Hagen Hall. Currently, the stairwell outside of Building 44 is bricked off eliminating access. There is also an old elevator shaft from the tunnel to Building 34.

LOCATION MAP

EXECUTIVE SUMMARY

This tunnel is 640 feet long by 6 feet wide and runs between tunnel 31-44 at the north end and building 38 at the south end. The tunnel lining is composed of brick and is in fair condition. Utilities within the tunnel at the time of inspection include water, steam, and electric; none of which were functioning. Minor problems at this time include minor deterioration of the brick lining mortar joints, corrosion of the utility pipes, deteriorated lighting conduits and wiring, downed electric lines, and scattered debris on the floor.

RECOMMENDATIONS**Critical Repairs:**

None.

Priority Repairs:

None.

Routine Repairs:

1. Remove debris from floor, 20 CY.
2. Replace electric lines, 640 LF.
3. Replace lighting conduits and wiring, 640 LF.
4. Repair water leak through lining near south end, Lump Sum.

FIELD INSPECTION REPORT

STRUCTURE NO. 31-38
INSPECTION DATE: 12/12/05

| CONDITION RATING CODES | | | |
|--|--|---|--|
| N | NOT APPLICABLE | 2 | CRITICAL CONDITION – advanced deterioration of primary structural elements. Failure cracks in steel or shear cracks in concrete may be present or scour may have removed substructure support. Unless closely monitored it may be necessary to close the structure until corrective action can be taken. |
| 9 | EXCELLENT CONDITION | | |
| 8 | VERY GOOD CONDITION – no problems noted. | | |
| 7 | GOOD CONDITION – some minor problems. | | |
| 6 | SATISFACTORY CONDITION – structural elements show some minor deterioration. | | |
| 5 | FAIR CONDITION – all primary structural elements are sound but may have minor section loss, cracking, spalling, or scour. | 1 | “IMMINENT” FAILURE CONDITION – major deterioration or section loss present in critical structural components or obvious vertical or horizontal movement affecting structure stability. Structure is closed to traffic but corrective action may return structure to light service. |
| 4 | POOR CONDITION – advanced section loss, deterioration, spalling, or scour. | | |
| 3 | SERIOUS CONDITION – loss of section, deterioration, spalling, or scour have seriously affected primary structural components. Local failures are possible. Fatigue cracks in steel or shear cracks in concrete may be present. | 0 | FAILED CONDITION – out of service; beyond corrective action. |
| CONDITION RATING CODE EQUIVALENTS FOR SUB-ELEMENTS | | | |
| G = GOOD (CODES 7 – 9) F = FAIR (CODES 5 – 6) P = POOR (CODES 0 – 4) | | | |

| | |
|----------------------|----------|
| 59. TUNNEL | 6 |
| 1. LINING | F |
| 2. PORTALS | F |
| 3. FLOOR | F |
| 4. DRAINS & DRAINAGE | G |
| 5. VENTILATION | G |
| 6. OTHER | N |
| 7. OTHER | N |
| 8. OTHER | N |

| | |
|-------------------------|----------|
| 401. ACCESS ROOM | N |
| 1. WALL | N |
| 2. CEILING | N |
| 3. FLOOR | N |
| 4. STAIRWAY | N |
| 5. OTHER | N |
| 6. OTHER | N |
| 7. OTHER | N |

| | |
|-----------------------|----------|
| 402. UTILITIES | 4 |
| 1. STEAM | P |
| 2. WATER | P |
| 3. ELECTRICAL | P |
| 4. GAS | N |
| 5. FIBER OPTIC | N |
| 6. OTHER | N |
| 7. OTHER | N |
| 8. OTHER | N |

| | |
|---------|---|
| 59.1 | Minor mortar deterioration throughout brick lining with chipped or missing bricks in several locations. |
| 59.3 | Moderate to heavy debris scattered along the floor. |
| 59.4 | Shallow ponding water at south end near large steam pipes, but water appears to be draining out of tunnel. |
| 402.1,2 | Light to moderate corrosion on steam and water pipe lines. Sections of the water lines are sagging due to lack of support or wire hangers. |
| 402.3 | Electric lines are sagging and down in many areas along the west wall. The lighting conduit along the ceiling has heavy corrosion throughout with exposed wiring. |
| | |
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PHOTOS



Photo 1: North Portal



Photo 2: South Portal



Photo 3: General view looking north from Building 34; Note downed electric lines



Photo 4: Typical deteriorated mortar joints in lining; Note chipped and missing ceiling brick



Photo 5: Chipped bricks on ceiling around vent hole



Photo 6: General view of elevator shaft to Building 34, east side



Photo 7: General view of storage room across from elevator to Building 34, west side



Photo 8: General view, looking south from Building 34



Photo 9: Damaged timber gate, 20' south of north portal



Photo 10: Typical debris on floor, looking north from Building 34



Photo 11: Water running and draining along floor near south end



Photo 12: Vent to tunnel, Building 34 in background



Photo 13: Vent to tunnel near Building 34



Photo 14: Utility tunnel from east wall near Building 34 to Building 36;
Note corrosion on steam and water lines



Photo 15: Rusty utility pipes and downed electric lines adjacent to tunnel to Building 36; Note debris on floor



Photo 16: Water pipe hanging by wire from rusted pipe; Note sag in water pipe



Photo 17: Moderate rust on pipe; Note water line suspended by wire



Photo 18: Steam pipe over north portal



Photo 19: General view of rusted valves and piping, north of tunnel to Building 36



Photo 20: Rusted valve and piping at Building 38



Photo 21: Disconnected 4" diameter copper pipe



Photo 22: Corrosion on steam pipes at south end



Photo 23: Heavy corrosion on lighting conduit; Note exposed wiring at light fixture



Photo 24: General view of downed lighting

TUNNEL INSPECTION REPORT

**ST. ELIZABETHS HOSPITAL – WEST CAMPUS
WASHINGTON, D.C.
TUNNEL BETWEEN BUILDINGS 31 & 44**



EAST PORTAL



WEST PORTAL

Report Prepared by:
Burgess & Niple, Inc.
4160 Pleasant Valley Road
Chantilly, VA 20151

Inspection Date: 12/12/05

TUNNEL IDENTIFICATION AND DESCRIPTION

| | |
|------------------|----------|
| Lining Material | Brick |
| Total Length | 405.0 FT |
| Springline Width | 6.0 FT |
| Begin Building | 31 |
| End Building | 44 |

| | |
|------------------------|-------------|
| Tunnel Height | 7.0 FT |
| Year Constructed | 1900 (est.) |
| Year Reconstructed | |
| Entry Through Building | 31 |

Tunnel previously connected the basement level of Building 31, Atkins Hall to the basement level of Building 44, The Old Storeroom. Currently the stairwell outside of Building 44 is bricked off eliminating access. Tunnel is accessed from Building 31.

LOCATION MAP

EXECUTIVE SUMMARY

This tunnel is 405 feet long by 6 feet wide and runs between buildings 31 and 44. Building 31 is at the east end of the tunnel and building 44 is at the west end. The tunnel lining is composed of brick and is in fair condition. Utilities within the tunnel at the time of inspection include water, steam, and electric; none of which were functioning. Minor problems at this time include minor deterioration of the brick lining mortar joints, deteriorated floor at the west end, corrosion of the utility pipes, deteriorated lighting conduits and wiring, sagging electric and telephone lines, and minor debris on the floor.

RECOMMENDATIONS**Critical Repairs:**

None.

Priority Repairs:

None.

Routine Repairs:

1. Repair undermined brick floor at west end of tunnel, 50 SF.
2. Replace lighting conduits and wiring, 405 LF.
3. Repair water leak through north wall, Lump Sum.
4. Remove debris from floor, 5 CY.

FIELD INSPECTION REPORT**STRUCTURE NO. 31-44****INSPECTION DATE: 12/12/05**

| CONDITION RATING CODES | | | |
|--|--|---|--|
| N | NOT APPLICABLE | 2 | CRITICAL CONDITION – advanced deterioration of primary structural elements. Failure cracks in steel or shear cracks in concrete may be present or scour may have removed substructure support. Unless closely monitored it may be necessary to close the structure until corrective action can be taken. |
| 9 | EXCELLENT CONDITION | | |
| 8 | VERY GOOD CONDITION – no problems noted. | | |
| 7 | GOOD CONDITION – some minor problems. | | |
| 6 | SATISFACTORY CONDITION – structural elements show some minor deterioration. | | |
| 5 | FAIR CONDITION – all primary structural elements are sound but may have minor section loss, cracking, spalling, or scour. | 1 | “IMMINENT” FAILURE CONDITION – major deterioration or section loss present in critical structural components or obvious vertical or horizontal movement affecting structure stability. Structure is closed to traffic but corrective action may return structure to light service. |
| 4 | POOR CONDITION – advanced section loss, deterioration, spalling, or scour. | | |
| 3 | SERIOUS CONDITION – loss of section, deterioration, spalling, or scour have seriously affected primary structural components. Local failures are possible. Fatigue cracks in steel or shear cracks in concrete may be present. | 0 | FAILED CONDITION – out of service; beyond corrective action. |
| CONDITION RATING CODE EQUIVALENTS FOR SUB-ELEMENTS | | | |
| G = GOOD (CODES 7 – 9) F = FAIR (CODES 5 – 6) P = POOR (CODES 0 – 4) | | | |

| | |
|----------------------|----------|
| 59. TUNNEL | 6 |
| 1. LINING | F |
| 2. PORTALS | F |
| 3. FLOOR | F |
| 4. DRAINS & DRAINAGE | G |
| 5. VENTILATION | G |
| 6. OTHER | N |
| 7. OTHER | N |
| 8. OTHER | N |

| | |
|-------------------------|----------|
| 401. ACCESS ROOM | N |
| 1. WALL | N |
| 2. CEILING | N |
| 3. FLOOR | N |
| 4. STAIRWAY | N |
| 5. OTHER | N |
| 6. OTHER | N |
| 7. OTHER | N |

| | |
|-----------------------|----------|
| 402. UTILITIES | 4 |
| 1. STEAM | P |
| 2. WATER | P |
| 3. ELECTRICAL | P |
| 4. GAS | N |
| 5. FIBER OPTIC | N |
| 6. TELEPHONE | P |
| 7. OTHER | N |
| 8. OTHER | N |

| | |
|---------|--|
| 59.1 | Minor deterioration of mortar joints in brick lining. |
| 59.2 | Chipped bricks at portals due to routing of pipes. |
| 59.3 | Moderate erosion and undermining of brick floor at west end (corner below Building 44). Minor debris on floor. |
| 59.4 | Water draining through north wall near mid-length of tunnel and draining out through floor. |
| 402.1,2 | Steam and water utilities have moderate to heavy corrosion. |
| 402.3,6 | Electrical lines for lighting and telephone cables are sagging. Lighting conduit has moderate corrosion. |
| | |
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PHOTOS



Photo 1: East portal at basement of Building 31, Atkins Hall

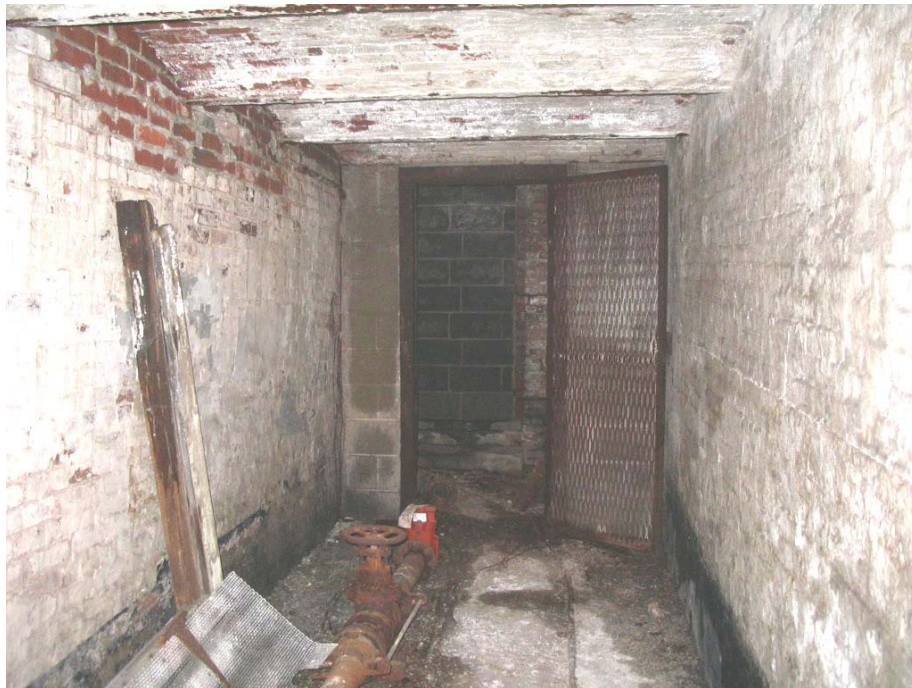


Photo 2: West portal at basement of Building 44, Old Storeroom;
Note blocked stairwell to Building 44



Photo 3: General view looking east from elbow below Building 44;
Note debris on floor and corrosion on pipes



Photo 4: General view near west end; Note sagging cables



Photo 5: General view of arched ceiling near west end of tunnel



Photo 6: Detail view of arched ceiling near west end of tunnel



Photo 7: Water entering north wall through galvanized pipe,
west of tunnel 31-38 north portal



Photo 8: Typical support for telephone cable, south wall

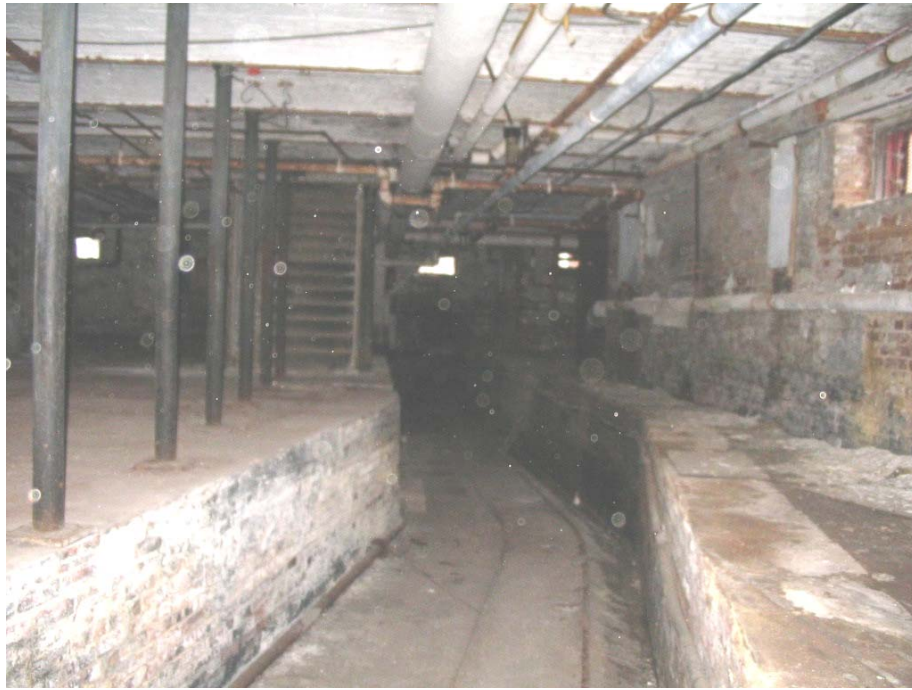


Photo 9: General view looking west toward east portal in basement of Building 31, Atkins Hall



Photo 10: Blocked stairwell to west end of tunnel

TUNNEL INSPECTION REPORT

**ST. ELIZABETHS HOSPITAL – WEST CAMPUS
WASHINGTON, D.C.
TUNNEL UNDER BUILDING 32**



NORTH PORTAL



SOUTH PORTAL

Report Prepared by:
Burgess & Niple, Inc.
4160 Pleasant Valley Road
Chantilly, VA 20151

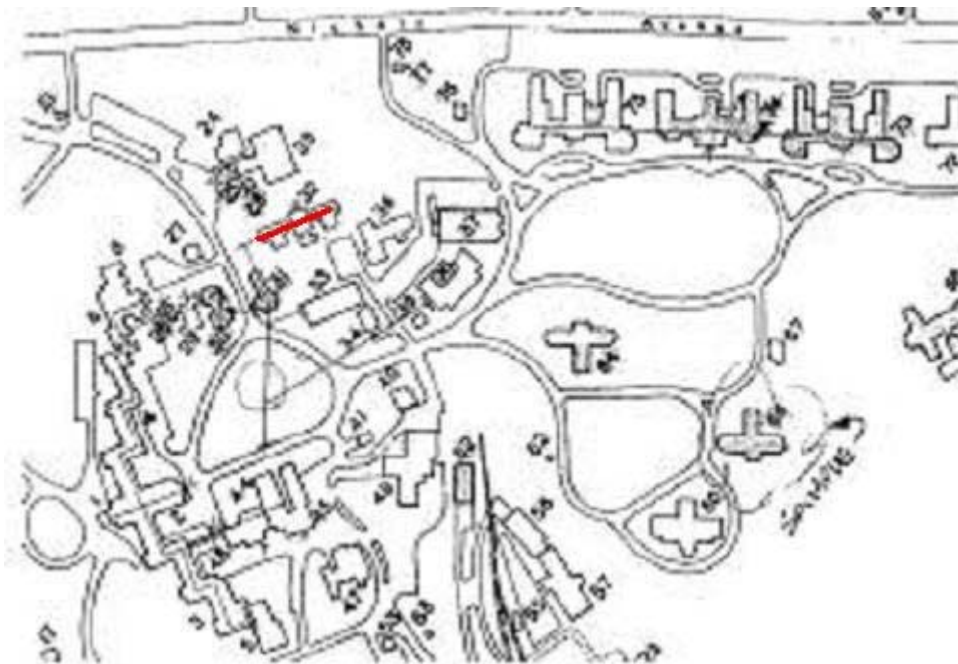
Inspection Date: 12/12/05

TUNNEL IDENTIFICATION AND DESCRIPTION

| | |
|------------------|--------|
| Lining Material | Brick |
| Total Length | 200 FT |
| Springline Width | N/A |
| Begin Building | 32 |
| End Building | 32 |

| | |
|------------------------|-------------|
| Tunnel Height | N/A |
| Year Constructed | 1900 (est.) |
| Year Reconstructed | |
| Entry Through Building | 31 |

Tunnel consists of basement rooms below Building 32, Relief.

LOCATION MAP

INSPECTION TEAM: T. Suthers, J. Wolfe (Burgess & Niple, Inc.)

EXECUTIVE SUMMARY

This tunnel is 200 feet long and consists of connected rooms beneath Building 32. Building 32 is above the tunnel and runs from north to south. The walls are composed of brick and are in fair condition. Utilities within the rooms at the time of inspection include water, steam, and electric; none of which were functioning. Some of the track system has been concreted over.

RECOMMENDATIONS**Critical Repairs:**

None.

Priority Repairs:

None.

Routine Repairs:

1. Remove debris from floor, 1 CY.

FIELD INSPECTION REPORT**STRUCTURE NO. 32-32****INSPECTION DATE: 12/12/05**

| CONDITION RATING CODES | | | |
|--|--|---|--|
| N | NOT APPLICABLE | 2 | CRITICAL CONDITION – advanced deterioration of primary structural elements. Failure cracks in steel or shear cracks in concrete may be present or scour may have removed substructure support. Unless closely monitored it may be necessary to close the structure until corrective action can be taken. |
| 9 | EXCELLENT CONDITION | | |
| 8 | VERY GOOD CONDITION – no problems noted. | | |
| 7 | GOOD CONDITION – some minor problems. | | |
| 6 | SATISFACTORY CONDITION – structural elements show some minor deterioration. | | |
| 5 | FAIR CONDITION – all primary structural elements are sound but may have minor section loss, cracking, spalling, or scour. | 1 | “IMMINENT” FAILURE CONDITION – major deterioration or section loss present in critical structural components or obvious vertical or horizontal movement affecting structure stability. Structure is closed to traffic but corrective action may return structure to light service. |
| 4 | POOR CONDITION – advanced section loss, deterioration, spalling, or scour. | | |
| 3 | SERIOUS CONDITION – loss of section, deterioration, spalling, or scour have seriously affected primary structural components. Local failures are possible. Fatigue cracks in steel or shear cracks in concrete may be present. | 0 | FAILED CONDITION – out of service; beyond corrective action. |
| CONDITION RATING CODE EQUIVALENTS FOR SUB-ELEMENTS | | | |
| G = GOOD (CODES 7 – 9) F = FAIR (CODES 5 – 6) P = POOR (CODES 0 – 4) | | | |

| | |
|----------------------|----------|
| 59. TUNNEL | 7 |
| 1. LINING | G |
| 2. PORTALS | G |
| 3. FLOOR | G |
| 4. DRAINS & DRAINAGE | G |
| 5. VENTILATION | G |
| 6. OTHER | N |
| 7. OTHER | N |
| 8. OTHER | N |

| | |
|------|---|
| 59.3 | Remnants of tile flooring covering sections of concreted over track bed. Minor debris on floor. |
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| | |
|-------------------------|----------|
| 401. ACCESS ROOM | N |
| 1. WALL | N |
| 2. CEILING | N |
| 3. FLOOR | N |
| 4. STAIRWAY | N |
| 5. OTHER | N |
| 6. OTHER | N |
| 7. OTHER | N |

| | |
|-----------------------|----------|
| 402. UTILITIES | 7 |
| 1. STEAM | G |
| 2. WATER | G |
| 3. ELECTRICAL | G |
| 4. GAS | N |
| 5. FIBER OPTIC | N |
| 6. OTHER | N |
| 7. OTHER | N |
| 8. OTHER | N |

PHOTOS



Photo 1: North portal



Photo 2: South Portal



Photo 3: General view looking north



Photo 4: Remnants of tile floor covering track bed

TUNNEL INSPECTION REPORT

ST. ELIZABETHS HOSPITAL – WEST CAMPUS
WASHINGTON, D.C.
TUNNEL BETWEEN BUILDINGS 72 & 73



NORTH PORTAL



SOUTH PORTAL

Report Prepared by:
Burgess & Niple, Inc.
4160 Pleasant Valley Road
Chantilly, VA 20151

Inspection Date: 12/14/05

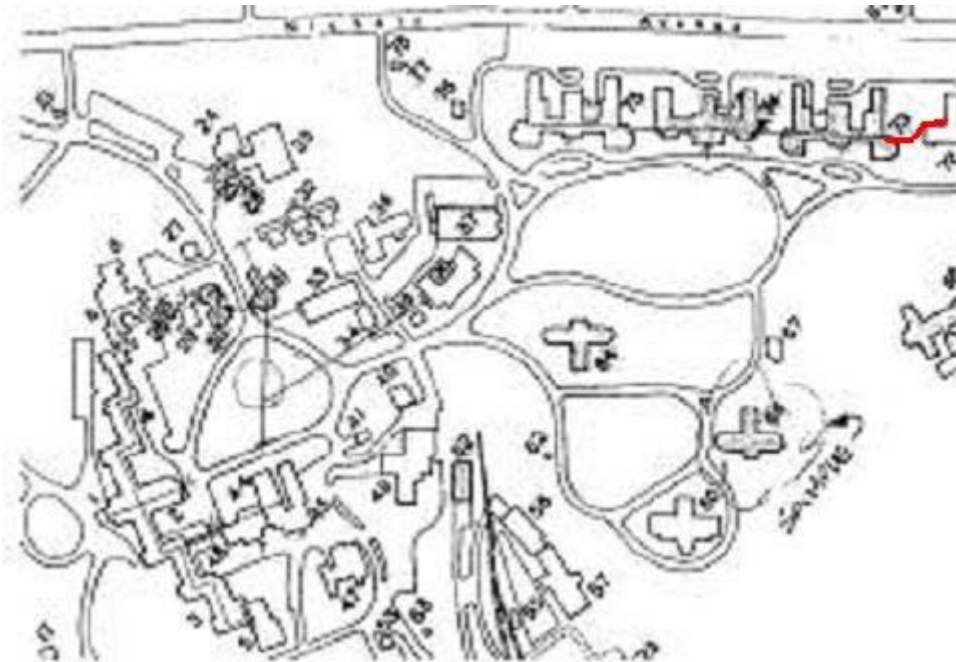
TUNNEL IDENTIFICATION AND DESCRIPTION

| | |
|------------------|----------------|
| Lining Material | Brick,concrete |
| Total Length | 275.0 FT |
| Springline Width | 5.4 FT |
| Begin Building | 72 |
| End Building | 73 |

| | |
|------------------------|-------------|
| Tunnel Height | 6.3 FT * |
| Year Constructed | 1900 (est.) |
| Year Reconstructed | |
| Entry Through Building | 73 |

Tunnel connects the basement level of Building 72, M Building to the basement level of Building 73, C Building. Currently the stairwell inside of Building 72 is sealed off eliminating street access.

* 5.1 FT vertical clearance below encased pipe near south portal

LOCATION MAP

INSPECTION TEAM: T. Suthers, J. Wolfe (Burgess & Niple, Inc.)

EXECUTIVE SUMMARY

This tunnel is 275 feet long by 5.4 feet wide and runs between Buildings 72 and 73. Building 72 is at the south end of the tunnel and Building 73 is at the north end. The tunnel lining is composed of brick and concrete and is in good condition. Utilities within the tunnel at the time of inspection include water, steam, and electric; none of which were functioning. Minor problems at this time include several cracks on walls and ceiling, undermined area of floor near north end, and deteriorated utilities.

RECOMMENDATIONS**Critical Repairs:**

None.

Priority Repairs:

None.

Routine Repairs:

1. Repair electrical conduit at kink in tunnel, 2 LF.
2. Repair undermined area of floor, 50 SF.